IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Backes Application No.: 10/781204 Filed: 2/18/2004 Title: Apparatus for Adjusting Channel Interference Between Devices in a Wireless Network Attorney Docket No.: 160-020	Group Art Unit: 2618 Examiner: Haroon

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APPELLANT'S UPDATED BRIEF PURSUANT TO 37 C.F.R. § 1.192

This updated Brief is submitted in response to the Notification of Non-Compliant Appeal Brief dated July 29, 2008.

I. Real Party in Interest

The real party in interest is Autocell Laboratories, Inc.

II. Related Appeals and Interferences

Appellants are not aware of any appeals or interferences that are related to the present case.

III. Status of the Claims

Claims 1-5 are pending in this application. Claims 3-5 are withdrawn, and claims 1-2 are rejected. This is an appeal of the decision by the Examiner dated March 21, 2007, finally rejecting all of the pending claims. None of the claims have been allowed. The rejections of claims 1 and 2 are the subject of this appeal.

IV. Status of Amendments

Claims 1 and 2 are currently amended in a response filed contemporaneously with this Brief to overcome a 35 U.S.C. 112, second paragraph rejection for lack of antecedent basis. The previously submitted response, filed January 24, 2007, was entered and considered by the Examiner.

V. Summary of Claimed Subject Matter

The subject matter of independent claims 1-2 is apparatus for adjusting transmission power of a fixed location device such as an access point or base station that communicates with a mobile device. In particular, the transmission

power is adjusted as a function of distance to the mobile device and distance to a neighbor fixed location device. Support for the claims is in the Specification at pp. 32-38 in section *2.a.1.3 AP Power Adjustment*. The recited limitation "logic for detecting that a second fixed location device is also using the radio frequency channel as the first fixed location device, and that the second fixed location device is nearer to the first fixed location device than any other fixed location device operating on the radio frequency;" is supported by the second paragraph on page 33, i.e., the AP with the Max TP Backoff value is the nearest AP. The recited limitations "logic for ascertaining whether the second fixed location device is nearer to the first fixed location device than the first mobile device; and logic for adjusting transmit power such that: if the second fixed location device is nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the first mobile device; and if the second fixed location device is not nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the second fixed location device" by the paragraph beginning on page 33 and ending on page 34. With regard to claim 2, the limitation "wherein the logic for adjusting transmit power does so in response to a message received from the another device, the message indicating power level backoff of the another device" is also supported by page 33 of the Specification, i.e., the TP Backoff value.

VI. Grounds of Rejection to be Reviewed on Appeal

Claims 1-2 are rejected under 35 U.S.C. 102(e) as being unpatentable over U.S. Patent No. 7,136,665 ("Ida").

VII. Argument

A. Ida fails to teach adjusting transmit power as a function of both distance to the mobile device and distance to the nearest neighbor fixed location device

It is well established that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

With regard to claim 1, the Office asserts that determining the nearest fixed location device to the mobile station at column 2, and setting transmit power based on distance from the mobile station to the fixed location device nearest that mobile device and column 6. Applicant agrees. In response to a request for increased power by a mobile station, Ida teaches that only the nearest base station should increase power,[1] i.e., the other base stations should maintain current power level.[2] This reduces overall power because the other base stations don't increase power in response to the request.

The teaching of Ida, even as characterized by the Office, is not what is recited in claim 1. Claim 1 describes how a fixed location device selects a

[1] Figure 2
[2] Figure 12

magnitude of transmission power based on both an associated mobile device and the nearest neighbor fixed station on the channel. In particular, if the fixed station is nearer, then power is set based on the distance to the mobile device. Those skilled in the art will recognize that this might cause some interference with the nearest neighbor fixed location device, but it is done to maintain service to the mobile device. If, however, the mobile device is nearer then power is set based on distance to the nearest neighbor fixed location device. This is done so that the operational range of the fixed location device is not unnecessarily decreased, e.g., when the mobile station is very near. It should therefore be appreciated that while Ida teaches **which** AP/base station should increase power, the presently claimed invention recites how the AP/base station **selects the power level** at which to transmit. In particular, the claimed invention selects the power level as a function of distance to both the mobile station and the nearest neighbor base/fixed location device. Even if Ida were viewed as teaching power level selection, there is no teaching of using distance between fixed location devices as an input.

In view of the above, the elements of claim 1 which distinguish Ida are "logic for adjusting transmit power such that: if the second fixed location device is nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the first mobile device; and if the second fixed location device is not nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the second fixed location device." Claim 2 further distinguishes claim 1 by reciting that "the logic for adjusting transmit power does so in response to a message received from the

another device, the message indicating power level backoff of the another device." If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988).

VIII. Conclusion

Appellants submit therefore that the rejections of claims 1-2 under 35 U.S.C. 102(e) based on Ida are improper for at least the reasons set forth above. Appellants accordingly request that the rejections be withdrawn and the case put forward for allowance.

Respectfully submitted,

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Appendix A - Claims

1. (previously presented) Apparatus for adjusting transmission power of a first fixed location device capable of communicating with a plurality of mobile devices associated with the first fixed location device in a wireless communications environment via a radio frequency channel of which a first mobile device is the furthest mobile device from the first fixed location device, comprising:

logic for detecting that a second fixed location device is also using the radio frequency channel as the first fixed location device, and that the second fixed location device is nearer to the first fixed location device than any other fixed location device operating on the radio frequency;

logic for ascertaining whether the second fixed location device is nearer to the first fixed location device than the first mobile device; and

logic for adjusting transmit power such that:

if the second fixed location device is nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the first mobile device; and

if the second fixed location device is not nearer to the first fixed location device than the first mobile device, transmit power is set based on distance to the second fixed location device.

2. (previously presented) The apparatus of claim 1 wherein the logic for adjusting transmit power does so in response to a message received from the second fixed location device, the message indicating power level backoff of the second fixed location device.

3. (withdrawn) Apparatus capable of communicating in a wireless communications environment via a radio frequency channel, comprising:
logic for detecting that at another device is also using the radio frequency channel;
logic for adjusting transmit power in response to a message received from the another device, the message indicating the transmitted power level of the another device.

4. (withdrawn) Apparatus capable of communicating in a wireless communications environment via a radio frequency channel, comprising:
logic for maintaining a known devices table, wherein the known devices table includes an entry for each other device operating on the radio frequency channel, and wherein for each entry, a backoff value is recorded for each other device, the backoff value for each device indicative of an amount that the device's power has been adjusted;
logic for setting the transmit power of the apparatus to a level equivalent to the apparatus' maximum transmit power minus the maximum of the backoff values recorded for each other device.

5. (withdrawn) The apparatus of claim 4 further comprising: logic for transmitting a backoff value indicative of the amount by which the apparatus has adjusted its transmit power.

Appendix B - Evidence Submitted

None.

Appendix C - Related Proceedings

None.